

GEELONG NATURALIST

MONTHLY MAGAZINE OF THE GEELONG FIELD NATURALISTS CLUB INC



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July 2019

General Meeting—Tuesday 2 July at 8.00 p.m.

Speaker: Stephen Murphy, <https://www.recreatingthecountry.com.au/my-background.html>

Talk: Conserving biodiversity into the twenty-first century.

Having the practical know-how to save our natural assets isn't enough. We also need to change our social and cultural values so that it becomes cool to nurture nature. Stephen proposes that every Australian should have a totem animal, a totem plant and a totem ugly.

General Meeting—Tuesday 6 August at 8.00 p.m.

Speaker: Members night.

Note that there is no casserole tea this August as we had our pizza night in March instead.

In the last few months we have welcomed to the club...

Barney Ellis & Merri Cheyne, Geelong West; Veronica Graf, East Geelong

.We wish them a long and happy association.

Obtain your username and password to log into the GFNC website

www.gfnc.org.au

Login is now required so if you haven't yet contacted info@gfnc.org.au to get your user name and password then hurry up, we don't want to miss any of your exciting observations or photos.

Submissions to *Geelong Naturalist*

The closing date for the next magazine will be **Monday evening 29 July**

Early lodgement of articles (small & large—maximum 2 pages) would be a great help—late copy may not be accepted.

Photographs—appropriately labelled, digital as .jpg —to the editor.

The editor for the **August edition** of the *Geelong Naturalist* is **Bernie Lingham, berningham@tpg.com.au**

GFNC is on Facebook

www.facebook.com/groups/GeelongFNCGroup/

A private online discussion group by invitation for members to share observations and other information

www.facebook.com/geelongfnc

The GFNC 'official' Facebook Community Page (public) where forthcoming events are promoted



Geelong Field Naturalists Club (Di...

The photo on the front cover is of a Puggle, an immature Short-beaked Echidna, taken in the Ocean Grove Nature reserve by Brooke Connor on 20/06/19.

The photo on the back cover is of a pair of Gang-gang Cockatoos taken in Highton on 26/05/19 by Graham Possingham.

Mailing roster
July: Jan Venters
August: Diana Primrose

Testimonial supporting the nomination of Craig Morley to be awarded Life Membership of the Geelong Field Naturalists Club (GFNC)

Barry Lingham

Craig has been fascinated by the natural world, especially birds, from a very young age and first joined the GFNC in 1976. Since that time, he has demonstrated a strong commitment to ornithology, conservation and the education of others about the natural history of our region. His highly developed knowledge of the birds of Geelong and beyond has been refined by decades of experience in the field, study and interaction with the ornithological community. He is recognised as a skilled field observer, utilising extensive talents in the recognition of bird calls, plumage variation, movements and physiology to identify species and record observations.

Craig has contributed immensely to the study and knowledge of the birds of the Geelong region by contributing thousands of comprehensive bird survey records. For more than 40 years he has assisted in organising and participating in programs, such as the biannual wader counts on the Bellarine Peninsula and surveys of Orange-bellied Parrots, Swift Parrots, bitterns and Hooded Plovers. In his role as Bellarine Peninsula Orange-bellied Parrot Regional Group Coordinator since 2005, he has promoted awareness of the recovery effort for the critically endangered Orange-bellied Parrot, organising, leading and participating in three surveys each year. He has coordinated the Brisbane Ranges Challenge Bird Count for several decades.

As a prolific contributor to the first and second *Atlases of Australian Birds* and more recently to *eBird Australia*, Craig's personal observations have allowed the study of movements, population changes and the emergence of new bird species at particular localities. Craig has inspired many others to add their observations to various surveys or bird databases so that the records are available to all.

Eastern Park and the Geelong Botanic Gardens hold a special fascination for Craig. He has now completed 40 years studying and documenting the birdlife that occur at this hidden gem on the eastern edge of Geelong.

Over many years the *Geelong Bird Report* (GBR) evolved from an annual record of interesting observations into a more detailed publication. Craig took on the role of editor in 2009 and greatly expanded the amount of information in each annual edition. Every bird species in the region was analysed to note any change in location, breeding or population and a table of individual observations was published.

Under Craig's editorship, the format of the *GBR* for the years 2013 to 2016 was changed to include a series of two-monthly population distribution maps and frequency

charts to show seasonal movements. This was achieved by computer analysis of thousands of records from across the Geelong region. Detailed comments on each species were included. The resulting publication has received acclaim from ornithologists across Australia and has been distributed freely via a pdf internet copy, along with a sell-out print run of 80 copies. Craig is also a regional reviewer of records for Victoria for the worldwide bird recording database *eBird*.

Craig has led the GFNC Bird Group since 2014 where his knowledge and enthusiasm has helped create interesting Bird Group meetings. His extensive range of contacts within the ornithological world has been used to provide a program of excellent presenters. He has also given regular presentations to the Bird Group on a wide range of topics from bird physiology and anatomy, thornbill habitat usage to birding destinations within Australia and beyond. The Bird Group excursions have been well organised and Craig has personally led many of the outings.

Craig has contributed his expert knowledge to many conservation programs and issues. In recent years, he has been a major driver in the club's campaign to preserve the former Moolap salt fields from potential housing development. He contributed information on significant species at the site and gave recommendations on development of the area as an international standard bird sanctuary. His extensive knowledge of birds has allowed him to make many contributions to conservation campaigns.

The Geelong Field Naturalists Club conducts many excursions to local sites of interest. Over a period of 40 years, Craig has regularly led, or assisted with many excursions, sharing his knowledge and encouraging others to learn more about birds, their habitat and interaction with the environment. As a former school teacher, he is particularly skilled at teaching and enthusing young people about local birds. A *Checklist of the Birds of the Geelong Region*, produced by Craig on behalf of the GFNC, has assisted people to identify and record their own bird observations.

Craig has published articles on the breeding and hunting behaviour of local Australian Hobbies for *Australian Field Ornithology*, on Gang-gang Cockatoos in *Eclectus* along with a great many short articles, reports and detailed analytic items in the *Geelong Naturalist*.

Craig's work and skill has strongly influenced the understanding and conservation of birds in the Geelong region. He was a member of the GFNC Committee in the

1980s, as well as currently serving on the Committee. He has worked on many projects and sub-committees to add a voice to conservation and education of the public. He has also represented the GFNC on advisory panels such as the Eastern Park and Geelong Botanic Gardens Master Plan Group and the Lower Barwon Wetlands

consultative Committee. His enthusiasm has inspired others and he has generously shared his knowledge with both novices and experts. He is indeed a most worthy nominee for Life Membership of the Geelong Field Naturalists Club.

Barwon & Moorabool Valleys excursion report

19 May 2019

Leader: Barry Lingham

Barry Lingham and Deborah Evans

A small number of GFNC members were joined by several visitors, including a family of six interested in the geology and ecology of the rivers. Unfortunately the GFNC member with the most geological knowledge of the area, Deborah Evans, had injured her knee and could not attend the outing.

Moorabool/Barwon Junction

We began our excursion with a leisurely walk from the carpark beside the Fyansford Hotel across the floodplain to the pedestrian bridge across the lower Moorabool River. Rainbow and Musk Lorikeets were calling from the eucalypts. Recent rain had allowed some river flow but large areas of the surface were covered by mats of *Azolla* sp. Further on, we left the main path and pushed through vegetation to emerge at the confluence of the Moorabool and Barwon Rivers. It seemed a pity that this junction of two major river systems that drain a vast area is rarely seen by most people. We did not see any platypus but they are often reported from this area.

As we returned to the carpark, the various species of eucalypts including River Red Gums, Manna Gums and Swamp Gums were identified. Most of the trees were planted as part of a successful effort to revegetate the area. At the Moorabool crossing we were entertained by an Australasian Darter that was diving and trying to spear fish with its pointed beak.

Exposed basalt at road cutting in Fyansford

The next stop was for morning tea, on the banks of the river beneath the old Fyansford Bridge designed by Sir John Monash and built using concrete made from the nearby limestone. We then got some exercise by climbing the stairs that ascended the scarp. At the top we had good views of the area plus the basalt exposed by the road cutting below us.

Limestone area

A car trip to Batesford took us past the remains of the large limestone quarry but we were only able to see it from a distance. The best viewing site is from a roadway beside the Eldorado Tourist Park. We had lunch in the picnic area behind the Batesford hotel, adjacent to the Moorabool River. Local basalt was used to construct the old bridge near the hotel.

Dog Rocks granite

From there we moved on to the Dog Rocks Flora and Fauna Sanctuary to follow the Moorabool River valley as

it flowed over the ancient granite rocks of that area. We were delighted to find a Tawny Frogmouth sitting on a branch of a Red Gum near the river. The final journey for the day took us via Ballan Rd and Viaduct Road back to the Moorabool River valley. From this site there are good views of the impressive railway viaduct built to allow trains from Geelong to Ballarat to cross the valley.

The brief Geological History of the Barwon and Moorabool valleys

Fyansford is a good spot to begin a geological excursion as it has many different types of rock outcropping nearby. The youngest rocks are the valley-basalt flows of the 'Newer Volcanics' that filled the old valleys of the Moorabool and Barwon some 2.1 million years ago. The flows blocked the rivers and temporarily created a large dam that held back the rivers. Extensive basalt flows completely filled the valley so that the area became a flat plateau. Eventually the Barwon River carved a new path around the southern edge of the basalt in the softer Cretaceous rocks of the Barrabool Hills. Buckley Falls is a location where the river flows over the basalt.

The limestone at the Batesford Quarry site was formed when that area was beneath a warm shallow sea in the Miocene era some 16 million years ago. At that time, the Dog Rocks formed an island. The granite from the Dog Rocks is from the same formation as the You Yangs. Liquid magma slowly cooling deep underground during the Devonian period about 370 million years ago formed the granite that was eventually exposed by erosion and uplift.

Further upstream on the Moorabool than we were able to reach on this excursion are the Ordovician sediments, with some spectacular folding and faulting.

The most ancient rocks in the area are the Ceres and Dog Rocks greenstones (epidiorite/ metagabbro) which were later intruded by the Devonian granite. These hard rocks formed in Neoproterozoic or Cambrian times more than 600 million years ago and were mined by the Wadawurrung to create excellent axe heads.

References

Birch, W.D. (ed.) (2003) *Geology of Victoria*, Geological Society of Australia (Victoria Division).

Dedman, V., McCarthy, G. & Pescott, T. (eds) (1987) *From Buckley's to the Break—A history of the Barwon River through Geelong*, GFNC Publication.



Batesford Quarry in February 2011 (left) and in June 2019

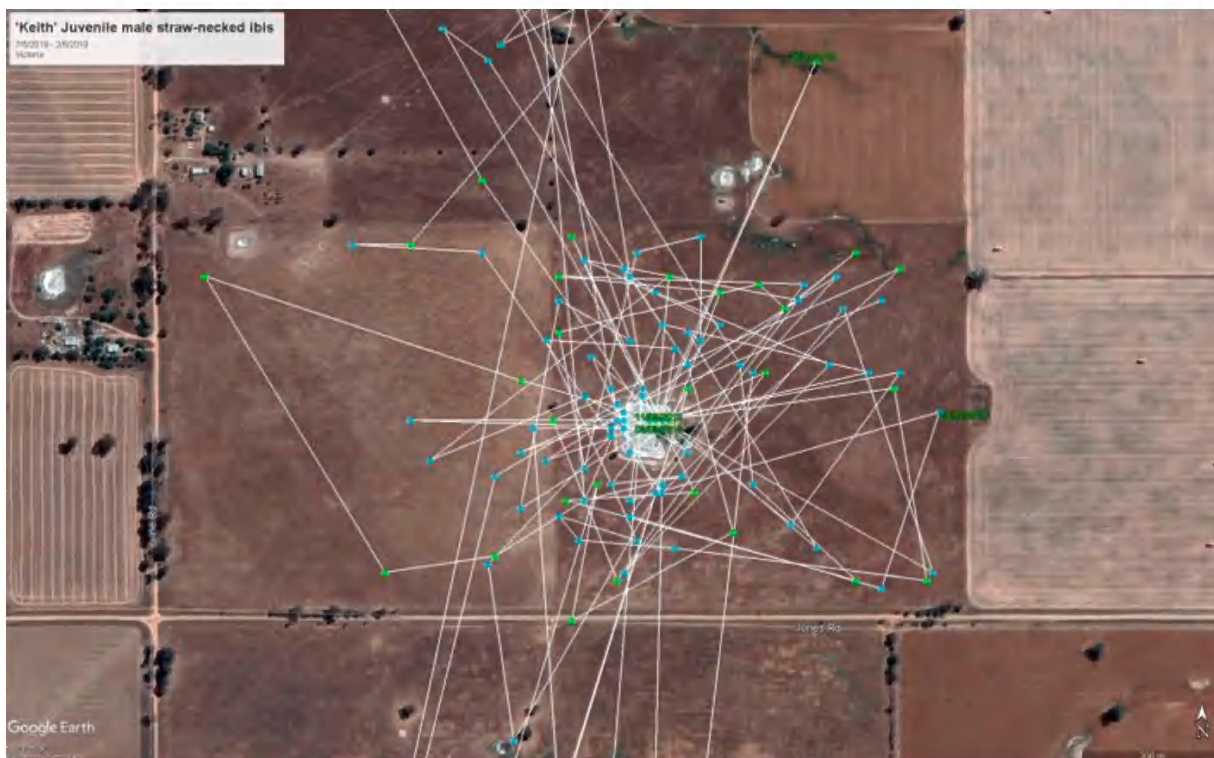
Photos: Deborah Evans

Murray-Darling Basin Environmental Water Knowledge and Research (MDB EWKR)

Craig Morley for Heather Mcginness

Last year I had the privilege of attending a thought-provoking and extremely interesting workshop on The use of environmental water and the response of waterbirds which was held at the Arthur Rylah Institute for Environmental Research. One of the fascinating presentations was by Heather Mcginness, a senior CSIRO research scientist, who gave details of the movements of GPS satellite-tracked waterbirds (ibis and spoonbills) back and forth across the continent in response to water and food availability. Dr Mcginness provides a fascinating email, usually monthly, detailing some of these movements. Several GFNC members are

now on the mailing list for these emails after I mentioned the project at several Bird Group meetings in 2018. I recommend this wonderful and fascinating project to you and you can find out more at: Murray-Darling Basin Environmental Water Knowledge and Research ... see: www.ewkr.com.au ... please view the video at this link. Or you can also stay in touch with waterbird information in general via the Facebook page (Waterbirds Australia) and Twitter (@AusWaterbirds)



The GPS tracked movement of 'Keith' the Straw Necked Ibis.

Photo: EWKR, Heather Mcginness

Have you seen any cicadas lately? It is winter, so you might not expect to. However, there are two cold season cicadas and they are silent, at least to our ears. Moreover, they are nocturnal species, hiding in crevices or under bark during the day. They are the Hairy Cicadas, *Tettigarcta crinita* and *T. tomentosa*; the only two cicadas in the world that don't make a strident, earsplitting or buzzing noise. These are the only living species of an otherwise extinct family, the Tettigarctidae. The males lack the abdominal air sacs that act as resonating chambers to project their calls. They have greatly reduced sound-producing organs (the tymbals) whose vibrations are transmitted through the substrate below the adult and are then detected by sensory organs (the empodia) on their legs. Both males and females produce these vibrations; unlike other cicada species, where only the males 'sing'. The Hairy Cicadas are dark in colour, enabling them to more easily absorb heat in the colder months. Their hairy bodies also help them retain heat.

Hairy Cicadas are small, only 2.5 cm in body length. They have small heads and eyes that are set closer together than their individual diameter. The habitat of the hairy cicada includes temperate rainforest, wet sclerophyll forest and subalpine snow gum woodland. The Tasmanian Hairy Cicada *T. tomentosa* has been found at Mount Sabine and Maits Rest. The Hairy Cicada *T. crinita*—also commonly known as the Alpine Hairy Cicada—has been found in the Otways and Tasmania, however, it is generally found in the mountain areas to the east of Melbourne and into south-eastern New South Wales.

There are over 3000 cicada species worldwide and 200 in Australia. Cicadas are very large bugs in the order Hemiptera. All hemipterans have mouthparts modified to pierce tissues and suck plant juices.

The mouth parts of the cicada are enclosed in a long, thin, beak-like sheath. The sheath (labium) passes backwards from the lower surface of the head between the legs when the insect is not feeding. It contains four fine, needle-like stylets used in feeding. The cicada pierces the surface of a plant with the stylets, then sucks up the sap through a tube formed by the concave surfaces of two of the stylets.

Cicadas have large compound eyes, one on each side of the head, and three very small glistening simple eyes (ocelli) on the top of the head. Their antennae are quite small and bristle-like. The body is stout with two pairs of wings which can range in length from 2.5 to 15 cm, according to the species. When not in use, the wings are folded back along the sides of the body. The forewing is much longer than the hind wing and is usually glassy and transparent.

All cicadas are remarkable creatures, often large, visible and colourful; resulting in some remarkable common names such as the Greengrocer, Yellow Monday, Floury Grocer, Tiger Prince, Fishing Reel Buzzer and the Squeaking Sprinkler.

Cicadas start life as an egg. The female deposits the egg in a groove she makes in a tree limb using her ovipositor.

Once the cicada hatches, it will begin to feed on the tree fluids. At this point, it looks like a termite or small white ant. When the young cicada is ready, it crawls from the groove and falls to the ground where it will dig until it finds roots to feed on. It will typically start with smaller grass roots and work its way up to the roots of its host tree. The cicada will stay underground from 2 to 17 years depending on the species. Cicadas are active underground, tunneling and feeding, never sleeping. They shed their hard shells periodically as they grow.

When the nymph reaches full size, it digs its way to the surface with its front legs which are specially adapted for digging. It generally surfaces about nightfall in late spring or early summer. The nymph then climbs on to a tree trunk or other object and sheds its skin for the last time. The fully winged adult cicada emerges and leaves its old, empty nymphal skin behind. Their adult life lasts only a few weeks.

Cicadas are the loudest insects in the world, some producing sounds of 120 decibels, painful to the human ear. Some daytime species group together so that the sound is increased, probably to deter bird predators. Some softer-sounding species call only at dusk. Songs are not always ear-shattering. The Brown Bunyip *Tamasa tristigma* song is a long even continuous low pitch zeep which may continue for minutes. The Bark Squeaker *Pauropsalta corticinus* call with zip-zip-zip for about 10 times followed by a long zip. The Bladder Cicada *Cystosoma saundersii* calls at night and has a whirring call.

The male cicada sings to attract females, which do not sing in response. Each species has its own distinctive call and only attracts females of its own species.

The apparatus used by cicadas for singing is complex. Research is still continuing on the mechanisms involved. The organs which produce sound are the tymbals, a pair of ribbed membranes at the base of the abdomen. Contracting the internal tymbal muscles causes the tymbals to buckle inwards and produces a pulse of sound. By relaxing these muscles, the tymbals pop back to their original position. In some cicada species, a pulse of sound is produced as each rib buckles.

Both male and female cicadas have organs for hearing. A pair of large, mirror-like membranes, the tympana, receive the sound. The tympana are connected to an auditory organ by a short tendon. When a male sings, it ceases the tympana so that it won't be deafened by its own noise.

Perhaps the commonest cicada locally is the Greengrocer *Cyclochila australasiae*. This is a large green cicada with a wide triangular head and a body up to 8 cm long. It may sometimes be yellow or orange. Dusk is the usual time to hear the male Greengrocers calling for females, but they also sing in the morning on warm days. The harsh song may be continuous or delivered in short bursts and can be extremely loud and penetrating.

Adult Greengrocer cicadas live for around six weeks. Females deposit eggs into dead or dying branches of a

food plant. The eggs hatch after about four months into spidery-looking, long-legged nymphs than burrow into the soil. Here they suck sap out of plant roots and grow for up to seven years, emerging as adults between September and November on warm nights, often following rain. Greengrocers are common on a range of trees; the adults spend much of the daytime sucking sap from branches.

Redeye Cicada *Psaltoda moerens* have black bodies and red eyes. The body is up to 6 cm long. They are most active in November and December. Their song is in two parts, slow at the start followed by a continuous rattle.

Double Drummer *Thopha saccata* is reputedly the loudest cicada in the world. It was the first Australian Cicada to be described in 1803 by the Danish zoologist Fabricius. It is the largest Australian Cicada with a body length of 12–15 cm. They are brown to orange brown in colour with a black pattern. Monotonous and drone like, the song has been likened to high-pitched bagpipes and can reach 120 decibels if several cicadas call together. The call has also been described as a loud piercing chainsaw-like whine which fluctuates smoothly in pitch. It consists of a series of pulses emitted at a rate of 240–250 a second. The tymbal covers are much larger than in other species and also make the call louder and send it in a particular direction. On each side of the male's abdomen there are the small pockets, the double drums, which are used to amplify the sound they produce. Singing occurs throughout the day and also at dusk in summer. They are active fliers.

Floury Bakers *Aleeta curvicosta* are solitary, slow fliers and perch head downwards on a tree trunk. They get their name from their white dusted appearance. White downy filaments cover much of the body, legs and some

wing veins, but this silver body fur is easily rubbed off. This species is found in eastern Australia. It has adapted to a wide variety of habitats, including urban areas. Its song is a distinctive hiss that can be heard at any time of the day. It starts with short one-second hisses and speeds up into a long continuous hiss that, on warm evenings, can last for up to 20 minutes.

Some cicadas are very tiny, no bigger than your little fingernail. The Black Squeaker *Atrapsalta encaustica* is widespread in Victoria but mostly found in coastal districts or near the Murray River, and the Smokey Buzzer *Myopsalta waterhousei*, a grassland species with a continuous buzzing call. They call from grass stems.

Have you ever been 'rained on' when standing under a tree in bright sunlight? The artificial shower could just be cicadas getting rid of excess fluid they have sucked up.

Some years are 'good' cicada years, when they are plentiful and often heard. Last summer I don't remember hearing any. Was that because it was dry, or cooler than normal? What will next summer bring?

References

- Australian Museum. Cicadas: Superfamily Cicadoidea. <https://australianmuseum.net.au/learn/animals/insects/cicadas-superfamily-cicadoidea/>
- Cicadas. Wikipedia <https://en.wikipedia.org/wiki/Cicada>
- Cicadas - Family Cicadidae. http://www.brisbaneinsects.com/brisbane_cicadas/
- Identifying our local Cicadas. Natural Newstead. <https://geoffpark.wordpress.com/2010/01/27/identifying-our-local-cicadas/>

Grow West annual Community Planting Day Sunday 21 July

9.30 a.m.–4 p.m., 155 Falcon's Track, Ingliston

Roll up your sleeves and get digging because the annual Grow West Community Planting Day is back on Sunday 21 July! Now in its 14th year, the annual planting day is one of Grow West's biggest events and is an important opportunity to rejuvenate and restore local landscapes.

This year's planting day will be held at two adjoining properties in Ingliston, totalling 123 hectares. The properties adjoin W. James Whyte Island Reserve (The Island). 4000 trees will be planted on the day to help create a biolink connecting The Island and Werribee Gorge State Park.

The Grow West team would love it if you could join them on the day. They'll be planting seedlings, and making up and installing tree guards to protect them. It's a great day out and a BBQ lunch and afternoon tea will be provided.

For more information and registration, go to:
<https://growwest.com.au/growwestplantingday2019/>

Swift Parrots in Ocean Grove

May 2019

Guy Dutson

Are we lucky or unlucky to have so many threatened species in our region? Many are small, unremarkable and little-known plants and invertebrates which could slip into extinction without anyone noticing, but several vertebrates are also on the verge of extinction. The Grassland Earless Dragon has recently been re-classified as a species restricted to native grasslands around Geelong and Melbourne but the last confirmed sighting in the Geelong area was by Trevor Pescott in the 1960s. Zoos Victoria are leading a project to search for this species using camera-traps looking down spider-holes. We can help by looking under rocks (and carefully replacing them) in remnant native grassland patches.

The Orange-bellied Parrot is one of the rarest birds in the world; only 20 individuals returned from their wintering habitat in Victoria to their breeding sites in Tasmania in spring 2018. Orange-bellied Parrots, or OBPs, traditionally wintered in significant numbers in the Geelong region where Craig Morley coordinates three searches each year for them. We are still sometimes very lucky, with one or two individuals seen most winters—but none yet this winter.

The other migratory Tasmanian parrot to spend its winters in Victoria, the Swift Parrot, is not as rare numerically but is declining quickly and is also categorised as 'Critically Endangered'. Swift Parrots are seen most autumns in Ocean Grove, usually just ones and twos passing through, but sometimes in large numbers, such as 100 observed in 2013. They feed on nectar and lerp (psyllid insects) from winter-flowering Bellarine Yellow Gums (itself a threatened species) and various exotic gums, especially Western Australian Tuarts.

In May 2019 I saw Swift Parrots on most days but they were elusive and unpredictable. Often, they would be feeding quietly in a tree and I could walk past without suspecting their presence. If they called, I would wait until they flew out of the tree and then count how many had been hiding. But they were rarely in the same tree an hour later or the next day. Most of my sightings were in mature flowering Yellow Gums in central Ocean Grove (between the northern half of Field Street and Presidents Avenue), the Woodlands Estate and the Yellow Gums Estate. Many days, I would visit all three sites in the morning and afternoon, usually seeing none or a handful of birds, but on four occasions I counted mobile flocks of 25–35 individuals. Not only did they move their feeding locations but they also moved roost—on a few afternoons birds flew high north out of Ocean Grove to an unknown roosting area, perhaps as far as the reservoir on Swan Bay Road, but on another occasion, they roosted in the Yellow Gums Estate.

Based on comparative observations in previous years, I think there were relatively large numbers of 'swifties' for a

relatively long time in Ocean Grove in May to June this year because the Yellow Gums were flowering well, and perhaps because there were so many Musk Lorikeets. In previous years, the smaller numbers of 'swifties' suffered ceaseless harassment from Noisy Miners defending the lerps and perhaps the nectar in their territory. Noisy Miners are listed as a 'key threatening process', in part for their impacts on Swift Parrots. "(Listed under the national EPBC Act and the Victorian Fauna and Flora Guarantee Act)" In May 2019 I counted at least 810 Musk Lorikeets in Ocean Grove (plus a minimum of 150 Rainbow (or hybrid) Lorikeets and 5 Purple-crowned Lorikeets). I wonder whether this number of nectivorous parrots 'swamped' the Noisy Miners and gave the 'swifties' opportunities to feed in peace. As well as there being so many lorikeets, miner numbers seemed to be down, perhaps after the record dry summer.

I have been trying to investigate this effect by comparing the birds in Ocean Grove to miner-free woodlands. Unfortunately, most of the Bellarine Yellow Gum woodlands are very small and full of Noisy Miners! Bannockburn has woodlands of the Melbourne subspecies of Yellow Gum with very few miners. The lack of miners probably allows vastly more honeyeaters at Bannockburn than Ocean Grove. I have recorded an average of six honeyeaters per minute in recent surveys at Bannockburn (totalling 4660 honeyeaters over 777 minutes) whereas Ocean Grove has virtually none except for the large Red Wattlebird. Ocean Grove also has some resident New Holland and White-plumed Honeyeaters but these are generally not in Yellow Gums. Unfortunately, Swift Parrots are rare at Bannockburn—perhaps the woodlands are too isolated, or perhaps we are just not looking hard enough. In autumn 2019 there were also flocks of Swift Parrots in Sugar Gum shelter-belts and plantations around Avalon and the Rowsley Valley, suggesting that we might be overlooking them in this otherwise unexciting habitat. All records of this critically endangered species are used by BirdLife Australia in their population monitoring and conservation planning, so loiter under winter-flowering gums for birds to call or fly out!

(At the time of writing, there were still a few Swift Parrots to be found in Ocean Grove and large numbers of honeyeaters in the Yellow Gum woodlands of Bannockburn Bushland Reserve.)

References

- <https://www.environment.gov.au/system/files/resources/43f24013-b621-4ff6-bf09-34da942e8ced/files/tympanocryptis-pinguicolla.pdf>
- Pescott, T. (1969) Earless Dragon Lizard. *Geelong Naturalist* August 1969: p. 57.
- <https://royalsocietypublishing.org/doi/10.1098/rsos.190233>
- <http://www.environment.gov.au/biodiversity/threatened/key-threatening-processes/overabundant-noisy-miners>

June 2019 bird observations—some highlights

John Newman & Craig Morley

The long list of records submitted to the Club website this month, including several new contributor records, is very encouraging that the colder wetter weather has not discouraged bird watchers from heading outdoors. There has been wonderful, much anticipated rain and some cold days but the birds are out there and winter holds its own special appeal on the Bellarine Peninsula.

There is a lot of freestanding water around our region at the moment with farm dams brimming, roadside ditches full and paddocks with waterlogged furrows. The birds are responding. A cumulative survey of wetlands on the Bellarine Peninsula in late May records the phenomenal number of 2029 **Freckled Ducks** present, far outnumbering any previous local survey record. This astounding result supports our understanding of how important our local wetlands are for the protection of this endangered duck species. **Cattle Egrets** are now scattered across many localities mostly seen with their cattle allies, a typical winter sight. **Banded Lapwings** at Avalon were spotted within the wet paddocks and **Black Swans** at Breamlea Saltmarsh and a **Brolga** family at Reedy Lake were refreshing finds. 1500 **Pink-eared Ducks** at Lake Lorne and the associated Macleod's Waterholes was a wonderful record. An unusual immature **Darter** at Blue Waters Lake at Ocean Grove may suggest some dispersal from the regular breeding habitat along the Barwon River in Highton and Newtown.

Other interesting winter bird sightings have pleasingly been submitted. The small roaming flock of **Swift Parrots** enjoying the Ocean Grove Yellow Gums continues to be seen across a small area but are very hard to pin down. A single **White-eared Honeyeater** in suburban Jan Juc was most unexpected away from the wetter forests. A flock of 30 **Zebra Finches** at Limeburners Lagoon in the Corio/Hovells Creek area further records the creeping movement of these most endearing finches. **Flame Robins** have been seen, the males lighting up fence lines and recently turned paddocks at Mt Duneed and **Dusky Woodswallows** at Curlewis are noted as an unusual winter bird for the Peninsula.

Winter is a time when diligent sea watching from exposed headlands can reveal unusual sea bird, or 'pelagic', species pushed north of their more usual wild southerly feeding grounds over the frigid southern winter. Most winters we receive many records of Albatross, Shearwaters, a few Prions and an occasional Petrel. Whilst we await some of these species to be reported again this year there appears to be a very interesting phenomenon of the very unusual **Southern Fulmar** being pushed towards our southern coast. Over recent weeks many many individuals of this species have been

seen right across the coast of South Australia and Victoria, up as far north as Sydney. Many birders and photographers who head out to the continental shelf on pelagic birding trips are reporting this species which has been remarkable. One of our regular winter beach walkers has found a damaged specimen of the **Southern Fulmar** at Ocean Grove, a most remarkable bird species for our records.

Large noisy winter flocks of **Pied Currawongs** and **Little Ravens** are in urban Geelong at the moment confirming that it is indeed winter. At least two of those **Little Ravens** have been seen carrying nesting material so breeding is on the minds of some bird species already in anticipation of spring bounty. Night birding in winter has the decided advantage of early darkness and it is with great interest that numerous **Eastern Barn Owl** and **Powerful Owl** records have been submitted. The ghostly white **Eastern Barn Owl** perched on fence posts in farmland is well known to those who patrol the quiet roads of our district at night particularly around Avalon and Werribee. Careful analysis of sound recordings taken in the Brisbane Ranges continues to detect **Powerful Owls** in the dense bushland.

Stubble Quail records in winter are few and far between so a record at Cargerie was notable and **Mistletoebirds** roam about in winter as a Newtown record confirms. A **Rose Robin** at Lara was a treat and 800+ **Musk Lorikeets** on the Peninsula was astounding. A winter **Brown Songlark** at Rokewood was similarly a most unusual bird for this time of the year.

A pair of **Sooty Oystercatchers** at Point Lonsdale was a good record of this scarce shorebird on our coast and 12 **Hooded Plovers** at Freshwater Lake was a reflection of post breeding winter flocking. The same number of **Banded Stilts** was also seen there.

Many raptor records have been submitted with **Little Eagles** scattered across the district, a gorgeous white form **Grey Goshawk** at Mannerim and **Black Falcons** continuing to be seen in the western farmlands. **Australian Hobbies** have again been seen hunting close to dusk in town and **Black-shouldered Kites** thankfully noted in many locations perched and hunting.

Once again we thank the keen and diligent observers in our Geelong region, listed below, who so willingly and keenly submit their records as incidentals to the GFNC website, or as incidentals or complete lists to eBird Australia.

And remember you can find these records and more at

<https://www.gfnc.org.au/observations/bird-observations>

Observers:

Jenny Possingham, John Mann, John Newman, Kate Newman, Lynne Clarke, Michael Wilson, OBP Survey, Paul Schillier, Ross Auchetl, Scott Rolph, Steve Davidson, Tom Fletcher, Trevor Hodson,

George Appleby, Jennifer Carr, Geoff Gates, David Tytherleigh, Chrissy Freestone, Brett Roberts, Jennie Turner, Craig Morley, Jeff Dagg, Jenny and Graham Possingham, Cheryl West Lau, Guy Dutson, Angus Hartshorn, Donna Smithyman, Gordon McCarthy, Barry and Bernie Lingham.

June butterfly report

Valda Dedman

The only butterflies recorded this month were by John Newman—two Cabbage Whites, one in Highton and one in Geelong, then three Saltbush Blues at Jerringot, and three Meadow Argus seen by Rod Lowther at Seaview Park. None since 9 June.

Launch of the 'Friends of the Barwon'

Trevor Hodson

On the evening of Friday 17 May at Provenance Winery in Fyansford a new group, the 'Friends of the Barwon' was launched. Over 150 guests were there to mark the occasion. The idea for this came from a series of Corangamite Catchment Management workshops in 2017. Around the same time a group of locals, led by Jennifer Morrow, Lach and Janet Gordon and Peter Greig, walked along the length of the Barwon, from the origin in the Otways above Forrest to the mouth at Barwon Heads. The walk was undertaken in Autumn, three days at a time, over four years. They were struck by the state of the river, spectacular in parts, but in others quite degraded and needing restoration.

On the evening many groups, organisations and government agencies and departments were represented. Once established as an incorporated body, the 'Friends' will advocate for all the rivers in the Barwon catchment, including the Moorabool and Leigh as well as tributaries such as Boundary Creek. The primary aim is to get legislative protection for the river and its tributaries in the same way the Yarra River has an Act of Parliament to protect it into the future. The new group will also press for restoration of flows, repaired riversides, and also improvements in water saving and reuse. Whilst even in time the river may not be brought back to what it was before European settlement there is much that can be achieved by adopting an holistic approach.

There was a meaningful welcome to country, and a determination that everyone could work together to restore the rivers in the catchment. Speakers told about

the framework for protecting the Yarra and steps taken to restore the Parramatta River in New South Wales to allow people to swim in it without fear of becoming ill. Christine Forster, Chair of the Ministerial Advisory Committee for the Barwon, launched a book *Walking the Barwon River* that documents the founding group's walk. It captures the essence of the walk and can be purchased from the Upper Barwon Landcare Network office in the Main Street, Birregurra or Cowlick Bookshop in Colac.

The interim committee was grateful for financial support from the Corangamite Catchment Management Authority and the Bendigo Bank, as well as Colac Otway Shire, and Surf Coast Shire. Landcare groups from the Bellarine Peninsula, Upper Barwon and Barrabool also contributed. Special thanks are due to Provenance Winery who provided the venue and Truffleduck who catered for the evening.

The next step is to complete the process of incorporation and to elect a committee to bring the idea to reality. This is an exciting time for those wanting to ensure the health of our rivers for us and our children and grandchildren to enjoy.

To learn more, 'Friends of the Barwon' has a Facebook page, or to join, please email: friendsofthebarwon@gmail.com

Contributions invited for the *Geelong Naturalist*

Members are encouraged to submit short articles and photos for consideration for the *Geelong Naturalist* each month.

If you have observed and/or photographed something interesting in the natural world of Geelong and its surrounds, please send it to us!

Please refer to the back page for submission details.

June fauna report

Trevor Pescott for GFNC Fauna Group

Mammals

There are so few local breeding records that the discovery of a juvenile **Short-beaked Echidna** at the Ocean Grove Nature Reserve is particularly interesting. According to Peter Menkhorst in *Mammals of Victoria* p. 39 echidnas mate in late winter to early spring, and the female lays an egg directly into her pouch. The egg hatches after about 10 days and the new born 'puggle' remains in the pouch until the spines begin to develop at about eight weeks of age. It is then left in a burrow nursery until it is about six months of age when it begins to explore outside. It is not weaned until seven months of age. Brooke Connor, Parks Victoria Ranger, found it early in June and forwarded the photograph on the front cover to Barry Lingham.

Koalas continue to be recorded from the Brisbane Ranges. On 30 April one was seen at the Upper Stony Creek Reservoir, sitting on the mown grass. When approached, it walked to a small tree and climbed—its fur was brown rather than the usual grey, and it appeared malnourished. Another was seen wide awake in a tree beside Whinray Road on 16 May. On 10 June Ross Auchettl found one halfway up a curved Messmate at Spring Creek, then on 18 June at about 7.00 p.m. for about an hour, he listened to 'a very talkative male (that) performed his various calls in spurts from somewhere near the creek below Sluice Track'.

Another inhabitant of the Brisbane Ranges is the **Sugar Glider**, but it is usually only after dark that you will see any moving among the trees. One was seen to leap from high in one wattle to another on the north side of the Anakie Gorge Track at about 4.50 a.m. on 26 May, then two were watched feeding and gliding in trees near Spring Creek on 10 June. Again, in the Anakie Gorge, Michael Wilson and Ross Auchettl could hear, but not see one calling from a tall eucalypt on 12 June.

Common Ringtail Possums frequent various parts of the region, in bushland and in the suburbs. One was seen at Eclipse Creek near Meredith on 22 May, climbing a tree in a windbreak near the house. Then at around 4.10 a.m. on 26 May, two were seen moving around on the branches of trees below the Lower Stony Creek Dam wall; according to Ross Auchettl 'the dam wall may offer some protection from the elements. Later two were seen in a very large wattle beside the Anakie Gorge Walk. On 10 June, one was seen to emerge from a hollow in a large dead tree near Spring Creek. Then four were noted in Anakie Gorge around midnight on 12 June. That they are still found in the suburbs was confirmed by the sighting of at least two in tall gumtrees in a suburban garden in Belmont at night on 19 June.

The conflict between suburban expansion and **Eastern Grey Kangaroos** is apparent from the observations by Bernie and Barry Lingham. On 9 June they saw an adult

and a younger animal within a few metres of the edge of Baanip Boulevard at Waurm Ponds. Others had been seen grazing in a paddock south of the road in future residential development land during the previous month.

Swamp (or Black) Wallabies have been a feature of the Ocean Grove Nature Reserve for a long time. They have survived while the Red-necked Wallabies that were once there appear to have died out. During 'a rapid perambulation at night' on 22 May, Guy Dutson counted a total of 23 individuals. They are also frequently seen in the Brisbane Ranges—on 19 June there were three grazing beside Butchers Road at 4.30 p.m. in an open grassy area.

We don't expect to receive reports of **microbats** active in winter but on 6 June Wendy Cook noted one or two flying along the road reserve at Eclipse Creek near Meredith at 5.40 p.m. They were not heard calling. During the fauna survey at Yaugher, two were seen flying at night in the survey area, and although they were silent, on the following night Grace Lewis heard a **White-striped Freetail Bat's** distinctive call.

Note—there are other mammal sightings in the Yaugher Fauna Survey report.

Herpetofauna

On 21 April an **Eastern Blue-tongued Lizard** was found under the plastic base of a netball ring in a farm garden at Eclipse Creek, Meredith.

Another interesting find was a **Metallic Skink** that Barry Lingham found at Ocean Grove on 5 June. 'The skink was in a piece of firewood that had been stored in a shed. It was in a crack in the wood and fell to the ground as I was splitting the wood with an axe. Its tail was dropped and continued to wriggle for several minutes. I removed the skink to a protected area beneath a shed.'

Frogs usually have well-defined calling times in the year, but the **Common Froglet** will call at any time, particularly if rain is likely to fall. Many were calling during the morning on 6 June from a flooded area of the City of Greater Geelong reserve at Salt Lagoon, St Leonards.

Observers: thanks to all the observers who listed their observations on the GFNC webpage, or emailed them directly to me, including Wendy, Colin, Owen and Kristen Cook, Bernie and Barry Lingham, Ross Auchettl, Michael Wilson, Guy Dutson and Trevor Pescott.

References

Menkhorst, P. (ed.) (1996) *Mammals of Victoria: Distribution, Ecology and Conservation*. Revised edition. Oxford University Press, Melbourne.

Fauna survey report—Yaugher 6–9 June 2019

Trevor Pescott for GFNC Fauna Group

Introduction

Over the last few years we have carried out fauna surveys in the Otway Forest Park near Yaugher, about two kilometres north of Forrest. Our study of the area is to determine which mammal species occur here and how the planned burning of sections over the last decade, and in the near future, affects the populations of several species notably the Long-nosed Potoroo. On this occasion the survey area was on the south side of Boundary Road opposite the mountain bike trail-head car park, and immediately east of Caspers Access. The dominant trees in the area are Messmate and Narrow-leaved Peppermint and there is a mixed ground cover of sword-sedge, some saw-sedge, bracken and grasses. There are some teatrees and blackwoods but these do not form a dense mid-storey layer.

Weather

We were fortunate to have a weekend of fine, sunny if cold weather. Average overnight temperatures were around 5°C with some light fog early, and clear sunny days with temperatures around 14°C. There was no wind.

Elliott traps

On Thursday 6/6/19 we set 40 small Elliott traps in four lines each with 10 traps spaced about 10–15 m apart. They contained a ball of peanut butter, golden syrup and oatmeal bait, bedding and they were in plastic rainproof covers.

Results

7/6/19: Bush Rat *Rattus fuscipes*, male wt 155 g*
Agile Antechinus *Antechinus agilis*, male wt 32 g
8/6/19: Agile Antechinus female 18 g
Agile Antechinus male 30 g
Agile Antechinus male 30 g
9/6/19: Bush Rat female 132 g
Agile Antechinus female 24 g
Agile Antechinus female 20 g
Agile Antechinus male 35 g

(*The male Bush Rat was suffering from a severely infected wound on the abdomen and was consequently euthanised in accordance with our permit conditions.)

Cameras

Two movement activated cameras were also set in place on 6/6/19, focused on bait stations. These produced

photographs of Agile Antechinus and Swamp Wallaby. Subsequently four other cameras were set in the survey area on the south side of Boundary Road and collected on 22/6/19. The first of these cameras was 100 m west of the Cemetery Road turnoff and the next three were spaced about 100 m apart to the west.

Results

Agile Antechinus *Antechinus agilis*: recorded on all cameras.

Southern Brown Bandicoot *Isodon obesulus*: photographs of an animal believed to be this species were obtained on one camera. We have not recorded this species here before so its presence will need to be confirmed by follow up study.

Sugar Glider *Petaurus breviceps*: several groups of photographs on one camera confirmed its presence. Surprisingly, perhaps, the animal was at the bait-holder at ground level.

Long-nosed Potoroo *Potorus tridactylus*: photographs on one camera have been identified as this species.

Swamp Wallaby *Wallabia bicolor*: photographs on at least two cameras.

Bush Rat *Rattus fuscipes*: several photographs were obtained.

Two PixController cameras were also set near the house at Yaugher, within a kilometre of the survey site and in habitat contiguous with it. Mammals photographed there were Agile Antechinus, Swamp Wallaby and Red Fox.

Other observations

A White-striped Freetail Bat was heard at night on 7 June.

(The survey was carried out in accordance with the conditions of our WSIAEC project approval 32.18 and our DELWP permit 10007876.)

Thanks to all who contributed to make the survey so successful.

Birds

The following bird list was compiled by Guy Dutson in the general Yaughner area, with some additions by other observers. Grace Lewis listed the species marked * in the survey site.

Australian Wood Duck	1	Red Wattlebird	2	Pied Currawong	2
Straw-necked Ibis	12	Crescent Honeyeater	5	Grey Shrikethrush	2
Laughing Kookaburra	2	New Holland Honeyeater	2	Golden Whistler*	
Gang-gang Cockatoo*		White-naped Honeyeater	30	Willie Wagtail	1
Sulphur-crested Cockatoo*	1	Spotted Pardalote	4	Grey Fantail	2
Australian King Parrot	1	White-browed Scrubwren*	3	Scarlet Robin*	
Blue-winged Parrot	1	Brown Thornbill	8	Eastern Yellow Robin*	5
Crimson Rosella*	11	Striated Thornbill*	14	Silvereye	5
White-throated Treecreeper*	5	Grey Butcherbird	1	Bassian Thrush*	
Superb Fairy-wren*	6	Australian Magpie*	9	Common Blackbird	2
Eastern Spinebill	1				

Guy's comments:

Blue-winged Parrot: heard well flying over; perhaps surprising at this season.

Crescent Honeyeater: loosely associating with White-naped Honeyeaters.

White-naped Honeyeater: surprisingly common in tall Manna Gums.

Membership renewals

Deborah Evans, Membership Officer

This is a final reminder to those of you have not renewed your subscriptions to do so as soon as possible. Please also remember to send your renewal form in if you have paid by direct credit (we have a few forms still outstanding) and to sign your form, as this is a requirement under our Rules.

Members who have not paid by 31 July will be removed from our *Geelong Naturalist* mailing list and from the club Facebook Group, so please don't delay any longer.

Renewal forms will be available at meetings or can be downloaded from the website and mailed or filled in electronically and emailed.

Tax-deductible donations can be made to the Geelong Field Naturalists Environment Fund at any time. Donations will be used for the environmental purposes of the Geelong Field Naturalists Club Inc.

Donate by electronic funds transfer:
CBA Account BSB 063 633 Account No. 1028 7433

Please ensure that the transfer is identified with your name and that it is a donation to the GFN Environment Fund. We will issue you with a numbered receipt suitable for taxation purposes. Donations of \$2.00 or more are tax-deductible.

Members are encouraged to arrive early at general meetings.

The room will be open at 7.15 p.m. to allow members to chat to other members and visitors.

No GFNC excursion in July

Next fauna survey

Bellarine Peninsula

12–13 July 2019

With July usually cold and wet, the Fauna Group activities have been reduced to Friday and Saturday.

Friday 12 July: 10.00 a.m.—meet at the Swan Bay Jetty to undertake a check on the three tile grids we have established around the foreshore in a search for the Swamp Skink.

We will move from there to Andersons Road for the second grid then on to Charlie's Hole at St Leonards. This should take about three hours.

Saturday 13 July: 9.00 a.m.—meet at the Information Centre at the Ocean Grove Nature Reserve. We are due to undertake some re-stringing of the Club's two harp traps so they will be in good condition for use when the weather warms and bats become active. After lunch we will inspect some tile grids in the reserve to see which reptiles are over-wintering there.

8–11 August: again concentrating on the Bellarine Peninsula, we will have a look at some of the other reserves, in particular Point Richards and the Drysdale Basin.

Group excursion

Buckley Falls, Fyansford

Thursday, 25 July 2019

Leader: Cheryl West Lau

In winter it is good to get out and have a refreshing break from the heated comfort of our homes. Please come and join me for a walk and birdwatching along the Barwon River in Fyansford. We should see a variety of water birds as well as other birds that inhabit the area around the river. We will start at Buckley Falls lookout and walk towards Baums Weir and the canoe launching platform, and then return along the same track—distance is approximately 1 kilometre each way.

Meet: 9.00 a.m. at the Buckley Falls Car park, situated at the end of Upper Paper Mills Road, Fyansford. If coming from Geelong, the Upper Paper Mills Road is the second turn-off on the left after the bridge in Fyansford on the Hamilton Highway (B140). Once you have turned into the Upper Paper Mills Rd follow the road around until the end, where the Buckley Falls carpark is situated. Please note: The first turn-off after the bridge is Lower Paper Mills Rd (keep going to the next turn-off).

Bring: Binoculars, water, and morning tea. Please wear comfortable walking shoes, hat (and gloves) and wet weather gear.

Finish: Around 12 noon. You may like to have a coffee at the Old Paper Mills complex, which is situated nearby.

Enquiries: Email: cwesty@iprimus.com.au
Mobile: 0428 758 567

GFNC Program Subcommittee Meeting

Monday 22 July 2019

7.30 p.m.

The Program Subcommittee is starting to draw together ideas for speakers and excursion locations for the 2020 club program of General Meetings and General Excursions.

Do you have suggestions for potential presenters, or recommendations for local areas to visit and explore as part of the monthly excursion program? If so, please send your ideas through to **Rustem Upton, Program Coordinator at program@gfnc.org.au**.

Are you interested in being involved with the Subcommittee in reviewing suggestions and helping to draw together a varied and interesting set of activities for club members to learn from and enjoy? If you answered yes, then please let Rustem know and join us on 22 July.

The meeting location will be at Bernie and Barry Lingham's residence, 49 Cuthbertson Drive Ocean Grove.

National Tree Day

Sunday 28 July 2019

July is the month for tree planting, so if you can't get to the Grow West planting day on 21 July, then put 28 July into your calendar instead. Many of the local groups have something planned; for example: Barrabool Hills Landcare; Batesford Fyansford Stonehaven Landcare; Bellarine Landcare; Pt Richards Flora and Fauna Reserve, Friends of Bannockburn Bush—and that's just for starters.

So, check out your local Friends or Landcare group, or check the National Tree Day website at:

<https://treeday.planetark.org/find-a-site/>

You could also ring Tim Trottier at Geelong Landcare Network on 0438 525 502 or check the Geelong Landcare Network Facebook page for information about local sites.

Coming events

JULY 2019

- 2 General Meeting: Stephen Murphy—Conserving biodiversity into the twenty-first century
 12–13 Fauna survey: Bellarine Peninsula
 18 Bird Group: Nick Carter—Powerful Owls
 22 Program subcommittee meeting
 25 Bird Group Excursion: Buckley Falls, Fyansford
 27–28 Orange-bellied Parrot Survey—Craig Morley

AUGUST 2019

- 6 General Meeting: Members Night
 8–11 Fauna Survey
 13 Plant Group: Meeting, sharing photos and observations
 15 Bird Group: Jeff Davies—ID puzzles—confusing 'pairs'
 18 Excursion: Linton—Clarksdale Sanctuary
 19 Conservation subcommittee meeting
 22 Bird Group Excursion: Woolloomana in early Spring

GFNC COMMITTEE 2019–2020

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Vice-President	Vacant	
Immediate past President	Rod Lowther	
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GFNC meetings are held in the Geelong Botanic Gardens meeting room, and start at 8.00 p.m.

Entrance is at the intersection of Holt Rd and Eastern Park Circuit in Eastern Park. [*Melway* 452 G4]

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